

HEALTH TOMORROW, VOL. 4 (2016)

Gross, Miriam (2016). *Farewell to the God of Plague: Chairman Mao's Campaign to Deworm China*. Oakland: University of California Press. ISBN 9780520288836.

Reviewed by John Knight

China's anti-schistosomiasis campaign was once viewed as a model for the developing world. The parasitic disease, commonly known as snail fever, was endemic throughout much of southern China at the time of that country's 1949 Communist Revolution, infecting more than 10 million people and putting 100 million more at risk. After learning that schistosomiasis had been eradicated in Yujiang County, Mao Zedong wrote a celebrated poem in 1958 entitled "Farewell to the God of Plague," marking not just China's victory over snail fever, but that of "science" over "backwardness." Joshua Horn's *Away with All Pests* (1969), a first-hand account of Chinese healthcare, praised the Maoist approach for its effectiveness and low cost, and the campaign's reputed success was a major influence on the World Health Organization's Alma-Ata Declaration of 1978. However, by the 1980s, the enthusiasm which had greeted the Chinese model had subsided. Once it became clear that government statistics from the era were inflated, claims that "barefoot doctors" were capable of conducting medical miracles no longer seemed credible. Like the wider twentieth century socialist movement of which it was a part, China's campaign to eradicate snail fever appeared to have promised far more than it delivered.

Miriam Gross, an assistant professor in Chinese history and area studies at the University of Oklahoma, has written the first monograph on the Maoist healthcare model since the late 1970s. Employing newly available archival materials from Shanghai, Jiangxi, and Jiangsu, Gross uncovers that while snail fever was never completely eradicated, 95% of the infected population had been cured by 1981. She attributes this

success to advances in treatment, and downplays the importance of widely promoted prevention efforts. By doing so, Gross upends established scholarly and popular understandings of China's snail fever campaign. It turns out that the campaign was more effective than thought, albeit for reasons different than the ones commonly given.

Also provocative are the author's findings related to "science." Even though Mao and other radicals were dismantling China's scientific bureaucracy during the Great Leap Forward (1958-61) and Cultural Revolution (1966-76), "grassroots science" remained a central feature of the Maoist era. Grassroots science differed from normative science in that it arose from problem solving rather than tests with control groups. Nonetheless, it did employ scientific tools such as statistics, mapping, and data analysis, which allowed young activists to conduct planning and – with the help of medical experts – combat the disease. Gross persuasively reads the anti-schistosomiasis campaign as part of a wider trend of "scientific consolidation" through which the Communists secured their rule.

Chapter 1 covers the snail fever campaign at the elite level. Most Chinese political leaders did not feel that schistosomiasis was a pressing issue until late 1955 when Mao announced the goal to eradicate the disease within seven years. Gross traces this change to the turn in the countryside from lower-level cooperatives to advanced producer cooperatives and later communes. These multi-village sites had resources for healthcare and could mandate mass participation in prevention campaigns in return for work points. Also influential was the advice of Yoshitaka Komiya from the Japanese Society of Parasitology, who in 1956 argued that labor-intensive methods such as snail elimination were the best way for Chinese to tackle the disease. Still, despite Mao's backing, the campaign did not take off until 1957-58, and again in 1966-71, times when

large numbers of urban medical personnel were sent to the countryside for “reeducation.” In light of the publicity accrued to barefoot doctors, Gross’ discovery that medical experts played a central role in the anti-schistosomiasis campaign is an important finding.

Chapters 2 and 3 examine structural constraints affecting the campaigns. Aside from bureaucratic infighting, the biggest hindrance to participation was lack of economic incentive. Local cadres believed that diverting villagers from fieldwork to engage in “bizarre” activities such as suffocating snails was a waste of resources. Villagers were equally skeptical. Treatment in the 1950s required 40 days’ rest in a community hospital, during which time they were deprived of earning work points. Making matters worse, fees were the equivalent of a month’s salary, so patients were in fact double-charged. Treatment was not made free until the start of the Cultural Revolution. Ironically, it was during a period retrospectively described as “ten years of chaos” that the anti-schistosomiasis campaign was most effective.

One reason why villagers and local cadres were unwilling to commit to prevention work or treatment was because they saw no correlation between snails and snail fever. Traditionally, illness was seen as reflecting internal imbalances or the work of vengeful spirits. Chapter 4 details Party attempts at educating villagers to the real causes of the disease. Given that much of the rural population was illiterate, the Party relied on oral and visual methods to spread its message. Plays and films were emotionally stirring, but they were unable to imprint an understanding of the methods by which snail fever was transmitted. Illustrations fared no better; since they typically depicted sufferers with a distended belly, unaffected viewers deduced that the images

were not relevant. Even asking villagers to peer at the parasite through microscopes was not convincing, as they lacked understandings of magnification and disease transmission.

Chapter 5 examines the campaign's highly publicized efforts at prevention. Building dams or digging irrigation canals, while reducing the habitat in which snails could thrive, appeared to villagers as threatening the community's *feng shui*. When the disease returned after the cessation of prevention efforts during the Great Leap Forward famine, villagers took it as a sign that the Party's "scientific" techniques rested on a faulty understanding of the world. Rather than education, it was social pressure and appeals to patriotic sentiment that motivated people to participate in campaigns.

Chapter 6 looks at evolving treatment methods. Medical advances reduced treatment time to three days, and then, during the Cultural Revolution, there appeared an oral treatment that could be taken at home. Also important were changes in testing methods. Stool tests, the dominant method in the 1950s, were viewed as invasive and embarrassing. Villagers often evaded submitting samples, or turned in animal feces in lieu of their own. The development in 1964 of a skin test that could be employed in rural areas overcame villagers' hesitation and allowed for large-scale testing. Treatment, not prevention, became the dominant means to combat snail fever.

Chapters 7 and 8 examine the manner in which the Party employed "science" to gain legitimacy. Although the goal to develop cadres who were "red" and "expert" had been a state goal since the late 1950s, it was not until the Cultural Revolution that village youth possessed the skills to employ statistics, fill out forms and keep records, and carry out hands-on experiments. This scientific toolkit, while rudimentary, marked a considerable advance in village thinking, enabling barefoot doctors to achieve a level of

success previously unobtainable. Furthermore, with much of the established bureaucracy on unsure footing due to the Cultural Revolution, there was room for educated youth to assume positions of leadership in village campaigns.

Still, success was not due to the efforts of barefoot doctors alone. Just as important was the input of sent-down medical personnel. During the first half of the Cultural Revolution, nearly all graduates of Chinese medical schools were assigned to work in rural hospitals. In this manner, youth known by the local communities could wield their influence, while also benefiting from the advice of experts. Nearly two decades after the Communist revolution, “scientific thinking” had become integrated into the basic work process and reflected a “common sense” approach to problem solving. At the same time, by promoting a science-based rhetoric while dismantling urban scientific institutions and criticizing “superstitious” behavior, the Party presented itself as the ultimate arbiter of “truth,” undercutting room from which one could argue against state policies. Although not mentioned by the author, the Chinese government’s uncontested authority stands in contrast with the late Soviet model, where, as Ethan Pollock (*Stalin and the Soviet Science Wars*, 2006) has argued, “scientific truth” offered a way to discredit the regime.

The conclusion touches upon developments after Mao’s death in 1976, when communes were dismantled, trained doctors returned home, and adequate health care in rural areas became unaffordable. Given these changes, it is unclear why there was a brief spike in the snail fever campaign in the late 1970s. Did that period also follow the Maoist health care model? Gross here does not provide much detail. In any case,

China's Reform Era has seen an increase in schistosomiasis; roughly 100,000 more are infected today than in 1981.

The conclusion also evaluates China's snail fever campaign alongside the contemporaneous WHO campaign to eradicate malaria, as well as China's 2003 campaign against SARS. However, considering the differences in political, cultural, and economic factors between the malaria and snail fever campaigns, I wonder if comparisons between the two are tenable. I also see little that is "Maoist" in the SARS campaign other than social pressure to participate and reliance on state funding. It would have been better if Gross had treated these comparisons to a more in-depth analysis, instead of only touching upon them in the conclusion.

Minor qualms aside, it is clear that Gross has written an important work. In addition to fundamentally revising our understanding of the priorities and effectiveness of China's anti-schistosomiasis campaign, *Farewell to the God of Plague* is the first monograph to document how Chinese Communists employed science for political consolidation. Her account of the push and pull between locals and officials likely offers insight into the processes by which other self-consciously "modernizing" regimes have attempted to bring "progress" to their inhabitants, and offers an illuminating example of Michel Foucault's concept of biopower. Health professionals, China experts, post-colonial theorists, and historians of science will find much to ponder. Perhaps it is time to again ask if the Maoist health model has relevance for the developing world.